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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,852	12/08/2003	Alexander Pietz	31794-198947	9440

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EXAMINER

DEUBLE, MARK A

ART UNIT PAPER NUMBER

3651

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,852

Applicant(s)

PIETZ, ALEXANDER

Examiner

Mark A. Deuble

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/15 and 3/30/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the chain wheel, the steps or pallets, and the driving motor of claims 1-10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

following is required: The specification fails to recite or define the distributor gear of claims 2 and 7.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 4, 7, and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 7 recite the term "distributor gear" but this term is not defined by the claims or the specification in such a way as to give the term some defined scope. While the term may be read broadly to mean a gear that distributes drive force in some way, this is unclear as all drive gears distribute drive force. This implies that a more specific meaning is intended, but the claims and specification fail to provide such meaning and therefore the scope of the claims is impossible to ascertain. Appropriate correction is required while taking care not to add new matter.

Claims 4 and 9 each recite a "chain wheel" however it is unclear if the chain wheel is a part of the device of the claims because the claims are directed to "A device for driving step of an escalator or pallets of a moving walkway, wherein a chain wheel, having a chain wheel drive shaft, is coupled to the steps or pallets" and not to a device comprising the chain wheel. This inconsistency makes the scope of the claims impossible to ascertain.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by German document number 199 36 742 A1.

The German document, as discussed on page 2 of the NPL document dated June 15, 2004, shows a device for driving the step of an escalator and the associated handrail that comprises a driving gear with a first gear 1 and a second gear 3 that are coupled to the drive shaft of a chain wheel 13 through a chain 14. The first and second gears have variable reference diameters that fluctuate in a circumferential direction between a minimum value and a maximum value so that a motor coupled to the first gear 1 causes the driving gear to distribute a drive force irregularly to the chain wheel to compensate for the polygonal effect. The chain wheel has 6 teeth and the fluctuation of the variable reference diameters of the first gear and second gears have a one to three and a one to one correspondence to the number of teeth on the chain wheel respectively. Finally, it should be noted, as it was in the NPL document, that the driving gear ensures a synchronous run of the associated handrail with a joint drive. In order to by synchronous with the movement of the steps along the passenger carrying zone of the escalator,

the handrail must be driven uniformly. Therefore, the German document shows all the structure required by claims 1-10.

7. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Nurnberg et al. (U.S. Patent NO. 5,224,580).

Nurnberg et al. shows a device for driving the step of an escalator and the associated handrail that comprises a driving gear with a first gear 72 and a second gear 72a that are coupled to the drive shaft 86 of a chain wheel 84 through a series of gears 74/82. A motor coupled to the first gear causes the driving gear to distribute a drive force to the chain wheel to move the escalator steps. While the reference diameters of the first and second gears do not fluctuate in the fashion illustrated in Fig. 1 of the present application, they may nonetheless to be said to have variable reference diameters when that term is given its broadest reasonable interpretation. This is because the diameters of the gears measured from the tip of one gear tooth to the tip of a gear tooth on the opposite side of the gear and the diameters of the gears measured from one of the spaces between gear teeth and the corresponding space on the opposite side of the gear vary from each other. Finally, it should be noted that the chain wheel has a plurality of teeth and the fluctuation of the variable reference diameters of the first gear and second gears (which correspond to the number of teeth on the gears) have some correspondence that may be defined as the ratio of the number teeth on the first and second gear to the number of teeth on the chain wheel. Thus, Nurnberg et al. shows all the structure required by claims 1-4 and 6-9.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fargo et al. and Pietz both utilize specialized escalator drives to compensate for the polygonal effect on the escalator steps as they pass around a turn around portion at the ends of the escalator.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md



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